AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for stimulating living tissue(s), comprising the steps of:

producing a first ~~stimulator~~ stimulation pulse with a first pulse generator;

delivering the first ~~stimulator~~ stimulation pulse to the living tissue(s) through electrodes electrically coupled to the stimulator with at least one lead, and wherein at least one blocking capacitor electrically coupled to the first pulse generator ~~the~~ provides [[a]] net zero current flow through the living tissue(s);

generating a reverse pulse that discharges the at least one blocking capacitor in order to shorten the at least one blocking capacitor's discharge period, wherein a pulse width of the reverse pulse is longer than a pulse width of the first stimulation pulse and an amplitude of the reverse pulse is lower than an amplitude of the first stimulation pulse; and

producing a subsequent ~~stimulator~~ stimulation pulse with the pulse generator, wherein the subsequent ~~stimulator~~ stimulation pulse is delivered to the living tissue(s) at the end of the at least one capacitor's shortened discharge period.

2. (Original) The method of Claim 1, wherein the reverse pulse is generated by a second pulse generator.

3. (Cancelled)

4. (Original) The method of Claim 1, wherein an absolute total charge delivered by the first stimulation pulse equals an absolute total charge delivered by the reverse pulse.

5. (Original) The method of Claim 1, wherein a switching network operates on the output of the first pulse generator to generate the reverse pulse.

6. (Original) The method of Claim 5, wherein the switching networks reverse electrical connections to output nodes of the first pulse generator.

7. (Currently Amended) The method of Claim 1, wherein ~~stimulator~~ stimulation pulses are applied to the living tissue(s) at a frequency greater than about 250 Hz without building charge on the at least on blocking capacitors.

8. (Cancelled)

9. (Currently Amended) The method of Claim 1, wherein the steps are repeated with the subsequent ~~stimulator~~ stimulation pulse becoming the first ~~stimulator~~ stimulation pulse in order to produce high frequency stimulation pulses.

10. (Currently Amended) The method of Claim 1, wherein the living tissue(s) comprise spinal cord tissues and wherein the ~~stimulator~~ stimulation pulses applied to the spinal cord tissues manage pain.

11. (Original) The method of Claim 1, further comprising the step of implanting the first pulse generator, at least one lead, at least one blocking capacitor and electrodes within a living organism.

12. (Original) The method of Claim 1, wherein the living tissue(s) comprise at least one nerve bundle.

13. (Currently Amended) A neurostimulator, comprising:

a first pulse generator that outputs a first ~~stimulator~~ stimulation pulse;

at least one blocking capacitor electrically coupled to the first pulse generator output, wherein the at least one blocking capacitor is electrically coupled to the first pulse generator in order to provide [[a]] net zero current flow through living tissues, and wherein a reverse pulse discharges the at least one blocking capacitor in order to shorten the at least one blocking capacitor's discharge period, a pulse width of the reverse pulse being longer than a pulse width of the first stimulation pulse, and an amplitude of the reverse pulse being lower than an amplitude of the first stimulation pulse; and

at least one implanted lead electrically coupled to the output of the pulse generator that delivers the first ~~stimulator~~ stimulation pulse to electrodes proximate to living tissue to be stimulated, and wherein a subsequent ~~stimulator~~ stimulation pulse generated by the first pulse generator is delivered to the living tissue when the at least one blocking capacitor's discharge period is complete.

14. (Original) The neurostimulator of Claim 13, wherein the reverse pulse is generated by a second pulse generator.

15. (Original) The neurostimulator of Claim 13, further comprising a switching network that reverses electrical connections to output nodes of the first pulse generator to produce the reverse pulse.

16. (Cancelled)

17. (Original) The neurostimulator of Claim 13, wherein an absolute total charge delivered by the first stimulation pulse equals an absolute total charge delivered by the reverse pulse.

18. (Currently Amended) The neurostimulator of Claim 13, wherein the ~~stimulator~~ stimulation pulses are applied to the living tissue(s) at a frequency greater than about 250 Hz without building charge on the at least on blocking capacitors.

19. (Cancelled)

20. (Currently Amended) The neurostimulator of Claim 13, wherein the subsequent ~~stimulator~~ stimulation pulse becomes the first ~~stimulator~~ stimulation pulse in order to produce high frequency stimulation pulse patterns.

21. (Currently Amended) The neurostimulator of Claim 13, wherein the living tissue comprises spinal cord tissues and wherein the ~~stimulator~~ stimulation pulses applied to the spinal cord tissues manage pain.

22. (Original) The neurostimulator of Claim 13, wherein the first pulse generator, at least one lead, at least one blocking capacitor and electrodes are implantable within a living organism.

23. (Currently Amended) An implantable neurostimulator, comprising:

a first pulse generator that outputs a first ~~stimulator~~ stimulation pulse and a reverse ~~stimulator~~ stimulation pulse, wherein an absolute total charge delivered by the first ~~stimulator~~ stimulation pulse equals an absolute total charge delivered by the reverse stimulation pulse; and

at least one blocking capacitor electrically coupled to the first pulse generator outputs, wherein the at least one blocking capacitor provides [[a]] net zero current flow through living tissues, and wherein a reverse stimulation pulse is applied to and discharges the least one blocking capacitor in order to shorten the at least one blocking capacitor's discharge period.

24. (Currently Amended) The implantable neurostimulator of Claim 23, wherein the implantable neurostimulator electrically couples to at least one implanted lead in order to deliver the first ~~stimulator~~ stimulation pulse to electrodes proximate to living tissue, and wherein a subsequent ~~stimulator~~ stimulation pulse generated by the first pulse generator is delivered to the living tissue when the at least one blocking capacitor's discharge period is complete.

25. (Currently Amended) An implantable neurostimulator, comprising:

a first pulse generator that outputs a first ~~stimulator~~ stimulation pulse;

a second pulse generator that outputs a reverse ~~stimulator~~ stimulation pulse, wherein an absolute total charge delivered by the first stimulation pulse equals an absolute total charge delivered by the reverse stimulation pulse; and

at least one blocking capacitor electrically coupled to the first pulse generator's and second pulse generator's outputs, wherein the at least one blocking capacitor provides [[a]] net zero current flow through living tissues, and wherein a reverse stimulation pulse is applied to and discharges the at least one blocking capacitor in order to shorten the at least one blocking capacitor's discharge period.

26. (Currently Amended) The implantable neurostimulator of Claim 25, wherein the implantable neurostimulator electrically couples to at least one implanted lead in order to deliver the first ~~stimulator~~ stimulation pulse to electrodes proximate to living tissue to be stimulated, and wherein a subsequent ~~stimulator~~ stimulation pulse generated by the first pulse generator is delivered to the living tissue when the at least one blocking capacitor's discharge period is complete.

27. (Currently Amended) The implantable neurostimulator of Claim 25, wherein the first ~~stimulator~~ stimulation pulse and reverse ~~stimulator~~ stimulation pulse differ in pulse width and/or pulse ~~amplitude~~ amplitude.

28-34. (Cancelled)

35. (New) A method of operating a neurostimulator device that has a plurality of electrodes and a respective blocking capacitor coupled to each of the plurality of electrodes, the method comprising:

generating a first stimulation pulse by a pulse generator of the neurostimulator device and applying the first stimulation pulse to living neural tissue using a first electrode pattern;

generating a reverse pulse by the pulse generator and applying the reverse pulse according to the first electrode pattern to discharge blocking capacitors having retained charge after the first stimulation pulse, wherein a pulse width of the reverse pulse is longer than a pulse width of the first stimulation pulse and an amplitude of the reverse pulse is lower than an amplitude of the first stimulation pulse; and

after the blocking capacitors are discharged, generating a second stimulation pulse by the pulse generator and applying the second stimulation pulse to living neural tissue using a second electrode pattern.

36. (New) The method of Claim 35, wherein an absolute total charge delivered by the first stimulation pulse equals an absolute total charge delivered by the reverse pulse.

37. (New) The method of Claim 35, wherein a switching network operates on the outputs of the pulse generator to generate the reverse pulse.

38. (New) The method of Claim 37, wherein the switching networks reverse electrical connections to output nodes of the pulse generator.

39. (New) The method of Claim 35, wherein the first and second stimulation pulses are applied to living neural tissue at a frequency greater than about 250 Hz without building charge on the blocking capacitors.